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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,677	02/06/2001	Kesatoshi Takeuchi	202498US2CONT	2900

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT	PAPER NUMBER
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2675

19

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,677

Applicant(s)

TAKEUCHI, KESATOSHI

Examiner

Srilakshmi K. Kumar

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following office action is in response to the request for reconsideration filed on December 1, 2003. Claims 1-21 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (US 6,160,576) in view of Johnson (US 6,330,038).

As to dependent claims 1, 9 and 14, Higuchi et al disclose an image display apparatus, comprising: an image display device configured to display an image (Fig. 1, item 1); a setting section (Fig. 1, item 14) configured to allow a user to directly set image quality adjustment excluding contrast and brightness adjustments of the image; and an image processing section (Fig. 1, items 30, 40 & 50) configured to perform the image quality adjustment of the image according to the setting made by the user, and to perform contrast compensation to maintain a brightness at a center of a specific color region larger than a predetermined size within the image displayed by the image display device, regardless of the setting of the image quality adjustment (col. 5, lines 8-54, col. 5, line 63-col. 6, line 6). Higuchi et al do not disclose where the specific color region larger than a predetermined size. Higuchi et al do disclose where the radius of the area is varied as the first image enhancer 34 is used to sharpen the blur caused by defocus or age related decline in focus (col. 11, line 49-col. 13, line 27). It would have been obvious to one of

Art Unit: 2675

ordinary skill in the art that the specific color region larger than a predetermined size is shown by the system of Higuchi et al as stated above with the sharpening of the blur or defocus of the picture. This feature is advantageous as it enhances aged images to show a more refined and sharpened image. Higuchi et al do not disclose where the setting section (Fig. 1, item 14) is configured to allow a user to directly set image quality adjustment excluding contrast and brightness adjustments of the image.

Johnson discloses a video sharpness control device for a display. Johnson discloses in Fig. 7A and in col. 9, lines 29-43, where the sharpness may be set by the user separately from the brightness and contrast, so that the brightness can be maintained. It would have been obvious to one of ordinary skill in the art to combine the systems of Higuchi et al with that of Johnson as they both disclose displays with setting controls. The system of Johnson is advantageous as it enhances the video image by allowing the user to set controls separately.

As to dependent claims 6, 12 and 19, limitations of claim 1, 9 and 14, and further comprising, Higuchi et al disclose an image processing device, comprising: an image filter configured to perform filter processing of an image by using a selected one of a plurality of filters with different frequency characteristics (col. 6, lines 25-60); and a contrast compensation section configured to perform contrast compensation using a contrast compensation value, related to the selected filter, to maintain a brightness at a center of a specific color region larger than a predetermined size within an image that has undergone the filter processing, regardless of which filter is selected from the plurality of filters (col. 5, lines 8-54, col. 6, lines 25-60). Higuchi et al do not disclose where the specific color region larger than a predetermined size. Higuchi et al do disclose where the radius of the area is varied as the first image enhancer 34 is

Art Unit: 2675

used to sharpen the blur caused by defocus or age related decline in focus (col. 11, line 49-col. 13, line 27). It would have been obvious to one of ordinary skill in the art that the specific color region larger than a predetermined size is shown by the system of Higuchi et al as stated above with the sharpening of the blur or defocus of the picture. This feature is advantageous as it enhances aged images to show a more refined and sharpened image.

As to dependent claims 2 and 15, limitations of claims 1 and 14, and further comprising, wherein the image quality adjustment is a sharpness adjustment (col. 11, line 49-col. 13, line 27).

As to dependent claims 3, 7, and 16, limitations of claims 1, 6, and 14, and further comprising, wherein the specific color is white. Although Higuchi et al do not disclose where the specific color is white, it would have been obvious to one of ordinary skill in the art that the specific color could have been white as the image could have been one where there is no color and further a combination of R/G/B yields white and is advantageous as the image would have been brighter.

As to dependent claims 4, 10 and 17, limitations of claims 1, 9 and 14, and further comprising, wherein the image processing section includes:

an image filter configured to perform the image quality adjustment by selecting one of a plurality of filters with different frequency characteristics according to the setting of the image quality adjustment, and to perform filter processing on the image using the selected filter (col. 6, lines 25-60); and

a contrast compensation section configured to perform the contrast compensation upon the image that has undergone the filter processing, using a contrast compensation value related to the selected filter (Fig. 1, item 33, col. 6, lines 25-60).

Art Unit: 2675

As to dependent claims 5, 8, 11, 13, and 18, limitations of claims 4, 6, 9, 12, and 17, and further comprising, contrast adjustment section configured to perform contrast adjustment of the image independently of the contrast compensation section (Fig. 1 items 34 and 35, col. 11, line 49-col. 13, line 27).

As to dependent claim 20, see claims 3, 7 and 16, above.

As to dependent claim 21, see claims 5, 8, 11, 13, and 18, above.

Response to Arguments

3. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that there could be no incentive or motivation to combine the teachings in Higuchi and Johnson, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Prior art, Higuchi discloses in col. 5, lines 63-col. 6, line 1, "the color compensation parameter setting device 15 determines the amount of color compensation according to the values set by the age dial 14. The first enhancement parameter setting device 16 and the second enhancement parameter setting device 17 determine the amount of image enhancement according to the values set by the age dial 14." The age dial is set according to the age of the observer. Thus, age is set, and the color compensator, first and second enhancement parameters

Art Unit: 2675

are set accordingly as shown in Figs. 2-4. With respect to maintaining brightness, Higuchi discloses in col. 5, lines 8-54, col. 5, line 63-col. 6, line 6, color compensation to keep brightness.

Prior art, Johnson discloses a video sharpness control device for a display. Johnson discloses in Fig. 7A and in col. 9, lines 29-43, where the sharpness may be set by the user separately from the brightness and contrast, so that the brightness can be maintained. Johnson is primarily disclosed in order to teach where sharpness can be set independently from other display parameters.

Thus, the above rejection is maintained.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Srilakshmi K. Kumar** whose telephone number is **(703) 306 5575**.

Art Unit: 2675

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703 305 47000377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 703 306 5575. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703 305 9720. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 4700.

Application/Control Number: 09/776,677
Art Unit: 2675

Page 8

Srilakshmi K. Kumar
Examiner
Art Unit 2675

SKK
February 21, 2004



DENNIS-DOON CHOW
PRIMARY EXAMINER